a pressurized gas source for supplying said hyperbaric oxygen;

an oxygenator for receiving said hyperbaric oxygen;

a perfusate for absorbing said hyperbaric oxygen within said oxygenator; and

a fluid delivery tube attached to said oxygenator;

whereby oxygenated perfusate is delivered to said biological entity through said fluid delivery tube.

The system as defined in Claim 15, further including a metabolic supplement, whereby said metabolic supplement is added to said perfusate for delivery to said biological entity.

17. The system as defined in Claim 16, further including means for monitoring the effect of said metabolic supplement on said biological entity.

18. The system as defined in Claim 15, wherein said oxygenated perfusate contains at least 4.5 volume percent oxygen.

The system as defined in Claim 15, further including a temperature control unit whereby the temperature of said perfusate and said biological entity can be regulated from approximately 0 degrees centigrade to approximately 40 degrees centigrade.

26. The system as defined in Claim 15, wherein said perfusate contains biological entity waste products and said system further comprises a biological filter for removal of said biological entity waste products.

The system as defined in Claim 15, further including a perfusate container for holding said biological entity and a quantity of said perfusate within said vessel.

The system as defined in Claim 15, further including means for pumping said perfusate

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